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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/751,383 | 01/05/2004 | James G. Wohlford | S522.12-0010 | 2651 |

164 7590 04/13/2006
KINNEY & LANGE, P.A.
THE KINNEY & LANGE BUILDING
312 SOUTH THIRD STREET
MINNEAPOLIS, MN 55415-1002

EXAMINER

AYRES, TIMOTHY MICHAEL

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
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3637

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/751,383

Applicant(s)

WOHLFORD ET AL.

Examiner

Timothy M. Ayres

Art Unit

3637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,8-14 and 16-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8-14 and 16-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

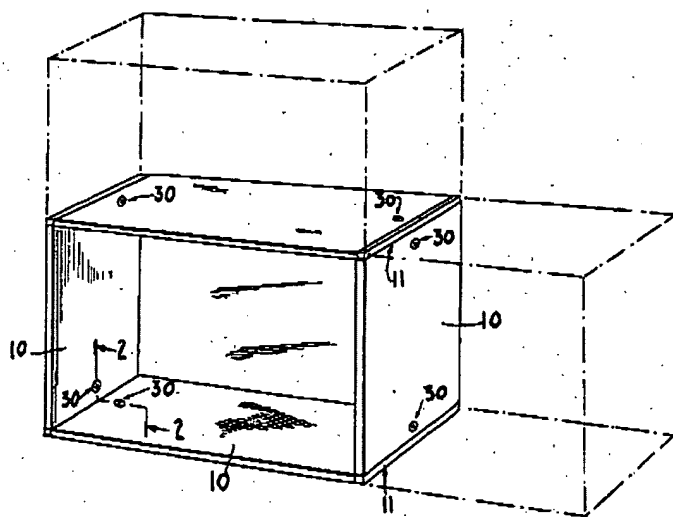
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 2, 4-6, 8-14, and 16 -25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 2,967,747 to Bus in view of US Patent 4,490,064 to Ducharme.

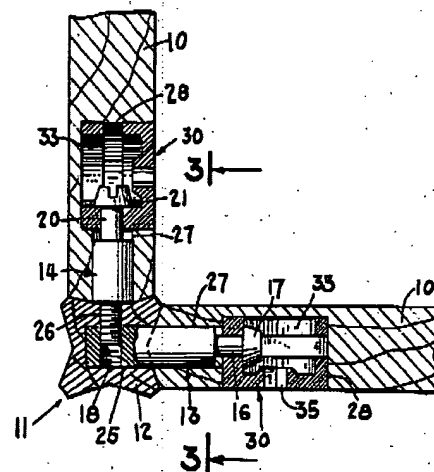
4. Bus '747 teaches a knockdown furniture connector system. Disclosed in figure 1 is a rectangular box using the connector system, the scope of the connector system implicitly goes beyond just a box and can be used for any sort of furniture including a home entertainment system (Col. 1, lines 37-41). The system includes a plurality of host structure (12) and a plurality of cross supports (10) held together with a plurality of fastening devices. The fastening devices are locking bodies (13,14), which are fastened to each other at their respective distal ends with an engagement member (18,23) inside

Art Unit: 3637

slots (25,26) of the host structure (12). The proximal ends of the locking bodies (13,14) have a head (17,21) that connects to a cam (30) so that the cross support (10) and the host structure (12) are fastened together by rotating the cam (30) in a direction to cause a linear motion of the locking body (13,14) to draw the cross support (10) and host structure (12) together. (Col. 3, lines 50-75, Col. 4, lines 1-6). A central shaft (15,19) is on the locking body (13,14) between the head (17,21) and the engagement member (18,23). The edge of the cross support (10) engages the wall of the host structure (12) when the fastening device is secured. The cam (30) is embedded in the cross support (10) as seen in figures 1-3. The cross support (10) is a panel with a portion (13,14, 30) of the fasteners contained within.



Bus '747 Figure 1

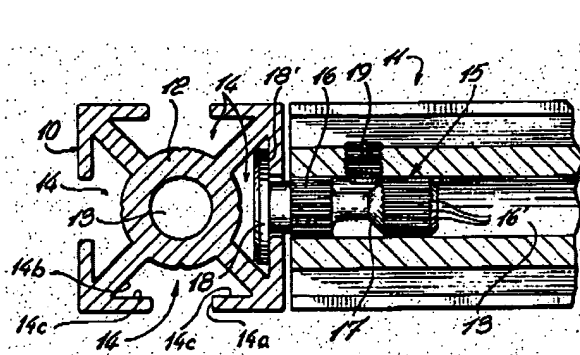


Bus '747 Figure 2

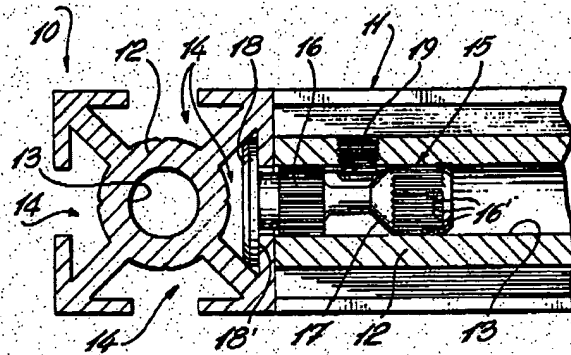
5. Bus '747 does not disclose expressly the host structure as a geometrically configured tube with the slot having a narrower outer portion and a wider inner portion

Art Unit: 3637

on the face of the host structure and a ball as the head on the locking body. Ducharme '064 discloses a joint for a modular frame construction. A geometrically extruded tube (10) is the host structure and is fastened to the cross support (11) via a locking body (15). The locking body (15) has an engagement member (18) that fits in and is movable in the wider portion (14b) of slot (14) of the geometrically extruded tube (10) as seen in figure 2. The contact face (18') of the engagement member (18) engages the internal face (14c) of a narrow portion (14a) of the channel (14) as seen in figure 3 when a set screw (19) is tightened to act on a camming surface (17) of the locking body (15). At the time of the invention it would have been obvious for a person of ordinary skill in the art to replace the host structure of Bus's system with the host structure of Ducharme and replace the engagement member of the locking body of Bus with the engagement member of the locking body of Ducharme so the host structure does not require specially machined apertures and thereby reducing the cost. It would have been obvious for a person of ordinary skill in the art to modify Bus '747 by having the locking body with head element in a ball configuration, since the applicant has not disclosed that having the head element be a ball solves any stated problem or is for any particular purpose and it appears that the locking body would perform equally well with Bus' '747 head element since it is functionally equivalent and works equally well.



Ducharme '064 Figure 2



Ducharme '064 Figure 3

Response to Arguments

6. Applicant's arguments filed 2/03/06 have been fully considered but they are not persuasive. Bus does not contain a slot on the face of the host structure, but Ducharme corrects this deficiency with a host structure meeting the need of the slot and the other limitations. Ducharme does not teach a portion of the fastener within the support panels, but Bus corrects this deficiency since part of the locking body and the cam are carried within the support panel. Both Bus and Ducharme teach furniture systems and when combined teach all the limitations as recited in the claims.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 3637

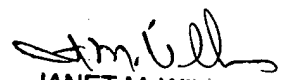
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Ayres whose telephone number is (571) 272-8299. The examiner can normally be reached on MON-THU 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TMA
04/03/06



JANET M. WILKENS
PRIMARY EXAMINER
A-10-73037